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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/970,912	10/04/2001	Perry J. Robertson	SD-6769	3158

20567 7590 04/27/2007
SANDIA CORPORATION
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EXAMINER

SHIFERAW, ELENI A

ART UNIT	PAPER NUMBER
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2136

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	04/27/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary

Application No.

09/970,912

Applicant(s)

ROBERTSON ET AL.

Examiner

Eleni A. Shiferaw

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 16 February 2007.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1, 4, 5, 12, 15, 16 and 22-27 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1, 4, 5, 12, 15, 16, and 22-27 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 02/16/2007 has been entered.

Claims Status

2. Claims 2, 3, 6-11, 13, 14 and 17-21 are presently canceled.
3. Claims 22-27 are presently added new claims.
4. Claims 1, 4, 5, 12, 15, 16, and 22-27 are presently pending.

Response to Amendment

5. Applicant's arguments with respect to claim 1, 4, 5, 12, 15, 16, and 22-27 have been fully considered but are moot in view of the new ground(s) of rejection.

Claim Objections

6. Claim 1 is objected to because of the following informalities: In line 10-12 applicant cancels limitation wherein "[, there being at least as many encryption/decryption security context identifiers as the predetermined number of stages in the encryption/decryption process] and also amends the canceled limitation by adding and underlying the word "security". It is not

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clear what applicant is trying to do (are you trying to cancel or amend to be present)?

Appropriate correction is required.

Claim Rejections - 35 USC § 112

7. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

8. Claims 1, 12, 22, and 25 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. On page 3 lines 17-20 of applicant's disclosure wherein said "for each of the plurality of encryption/decryption context, indexing according to the encryption/decryption context identifier into a bank of variables comprising initial variables and prior-stage output datablocks to retrieve a seed variable for the source data block; and...generating an output datablock from the source datablock and its corresponding seed variable", on page 5 lines 12-14 wherein "A first variant uses multiple IVs, the IVs being used to seed the encryption function for encryption of the first block of plaintext. There is one IV per stage of the encryptor/decryptor to seed the encryption function", and on page 6 wherein in "there are N stages seeded by N independent IVs, this results in block $2N+1$..." are not the same as amended subject matter "replacing an initial variable in the bank of initial variables with a new seed, as determined by a selected mode of operation, for the security context identifier. Applicant is required to indicate

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what page and what line number of his/her disclosure is the amendment come from when amending.

9. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

10. Claims 1, and 12 recite the limitation "an initial variable" in line 19. Is it a different initial variable from line 14 of "an initial variable"? There is insufficient antecedent basis for this limitation in the claim.

11. Claim 22 recites the limitation "an initial variable" in line 19. Is it a different initial variable from line 15 of "an initial variable"? There is insufficient antecedent basis for this limitation in the claim.

12. Claim 25 recites the limitation "an initial variable" in line 20. Is it a different initial variable from line 15 of "an initial variable"? There is insufficient antecedent basis for this limitation in the claim.

13. Claims 4, 5, 15, 16, 23, 24, and 26-27 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

A broad range or limitation together with a narrow range or limitation that falls within the broad range or limitation (in the same claim) is considered indefinite, since the resulting claim does not clearly set forth the metes and bounds of the patent protection desired. See MPEP § 2173.05(c). Note the explanation given by the Board of Patent Appeals and Interferences in *Ex*

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parte Wu, 10 USPQ2d 2031, 2033 (Bd. Pat. App. & Inter. 1989), as to where broad language is followed by "such as" and then narrow language. The Board stated that this can render a claim indefinite by raising a question or doubt as to whether the feature introduced by such language is (a) merely exemplary of the remainder of the claim, and therefore not required, or (b) a required feature of the claims. Note also, for example, the decisions of *Ex parte Steigewald*, 131 USPQ 74 (Bd. App. 1961); *Ex parte Hall*, 83 USPQ 38 (Bd. App. 1948); and *Ex parte Hasche*, 86 USPQ 481 (Bd. App. 1949). In the present instance, claims 4, 15, 23; and 26 recite the broad recitation "mode of operation of the encryption/decryption process requires feedback around the encryption/decryption engine", and the claim also recites "Cipher Block Chaining Mode with..." which is the narrower statement of the range/limitation. And claims 5, 16, 24, and 27 recite the board recitation wherein "the mode of operation of the encryption/decryption process requires feedback around the encryption/decryption engine, and the claim also recites "Digital Encryption Standard (DES) which is the narrower statement of the range/limitation.

Claim Rejections - 35 USC § 101

14. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

15. Claims 1, 5, 12, 16, 22, 24, 25 and 27 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. The preambles of all independent claims states that the encryption/decryption mode of operation requiring feed back around the pipelined engine. However not claimed in the body of the limitation and tangible result.

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Allowable Subject Matter

16. Claims 4, 15, 23, and 26 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims and Claims 1, 12, 22, and 25 would be allowable if rewritten or amended to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, 35 U.S.C. 101, and the objections set forth in this Office action.

Conclusion

17. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Eleni A. Shiferaw whose telephone number is 571-272-3867. The examiner can normally be reached on Mon-Fri 8:00am-5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nasser R. Moazzami can be reached on (571) 272-4195. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.


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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



April 25, 2007

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4, 25, 07